United States National Plan of Action for the Reduction of Incidental Catch of Seabirds in Longline Fisheries

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Introduction

The National Plan of Action for Reducing the Incidental Mortality of Seabirds in Longline Fishing (NPOAS) has been developed by the United States to fulfill our national responsibility described in the International Plan of Action for Reducing the Incidental Mortality of Seabirds in Longline Fishing (IPOAS), a voluntary plan endorsed by the Food and Agriculture Organization of the United Nations (FAO) Committee on Fisheries (COFI) in February 1999, commended by the March 1999 FAO Fisheries Ministerial, and adopted by the June 1999 FAO Council and November 1999 FAO Conference.

The IPOA-S applies to States in whose waters longline fishing is being conducted by their own or foreign vessels, and to States that conduct longline fishing on the high seas and in the Exclusive Economic Zones (EEZs) of other States. The IPOA-S calls on all States to implement the IPOA-S through the development of NPOA-S.

The NPOA-S was developed collaboratively by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS). This strategy reflects the different roles of these agencies on seabird interactions in longline fisheries, with NMFS charged with managing the U.S. fisheries under the Magnuson-Stevens Act and FWS carrying out its responsibilities for birds under the ESA and the MBTA.

Although the incidental catch of seabirds is often called "bycatch," it should be noted that this catch is not "bycatch" under the Magnuson-Stevens Act definition. Section 3 of the Magnuson-Stevens Act states that "bycatch" is "fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. Such term does not include fish released alive under a recreational catch and release fishery management program." However, this Act also defines "fish" as "finfish, mollusks, crustaceans, and all other forms of marine animal and plant life other than marine mammals and birds." Combining these two definitions, seabirds incidentally caught in longline fisheries are not considered "bycatch" under the Magnuson-Stevens Act. Seabirds are an incidental catch only, and are not targeted species for any U.S. fishery. For these last two reasons, the term in the NPOA-S for incidental seabird catch will be "bycatch."

This NPOA-S requires the regional fishery management councils¹ to analyze the impacts of regional longline fishing on seabird mortality and determine whether the precautionary imposition of seabird bycatch mitigation measures is appropriate and practicable. If found to be appropriate and practicable, management measures will be incorporated into individual Fishery Management Plans (FMPs) as part of a new FMP or as a regulatory amendment, and implemented as regulations.

The U.S. NPOA-S includes provisions for: assessment, data collection, prescription of mitigation measures, research and development of mitigation measures and methods, outreach, education, training about seabird bycatch avoidance, reporting, and continuing collaboration between NMFS and the FWS.

Background

A longline is "a line that is deployed horizontally and to which gangions and hooks or pots are attached. Longlines can be stationary, anchored, or buoyed lines that may be hauled manually, electrically, or

¹ Atlantic tunas, swordfish, and sharks are managed not by a regional fishery management council, but formally by the Secretary of Commerce. However, for the purpose of the NPOA-S, any reference to a regional fishery management council will also include the management process for the species in the Atlantic Tunas, Swordfish, and Sharks FMP.

hydraulically" (50 CFR § 600.10).² There are many other regional terms for similar types of gear, including hook-and-line gear and tub trawling.³

Although IPOA-S did not define the term "longline," the international fishing community has a common understanding of the equipment and techniques used with this style of fishing. This type of gear is generally deployed from the sterns of fishing vessels, with the main line following the vessel in a diagonal line until it enters the water. The baited hooks on this main line remain in the air, or are visible under the water, for varying lengths of time and distance depending on type of longline gear. Longline vessels also discharge offal in the forms of discarded fish, fish scraps from cleaning the fish before storage, and used or discarded bait.

The availability of "free" food in the forms of offal and bait attracts many pelagic birds to longline fishing operations. In the process of feeding, birds sometimes come into contact with fishing gear and are accidentally killed. Most seabirds taken during longline operations are attracted to the baited hooks when the gear is being set. These birds become hooked at the surface and are dragged underwater where they drown.

The probability of a bird being hooked or entangled is a function of interrelated factors including: type of fishing operation and gear used, length of time fishing gear is at or near the surface of the water, behavior of the bird (feeding and foraging techniques), water and weather conditions (e.g., sea state), size of the bird; availability of food (including bait and offal), and physical condition of the bird (molt, migration, health). Most pelagic bird species are susceptible to interactions with fishing gear.

Although all pelagic seabirds face a risk of an interaction, only the larger species have the physical capability and feeding strategy to face frequent interactions. In the United States, large pelagic seabirds occur in the highest density in the Pacific Ocean, and most of the U.S. research on seabird interaction reduction has occurred in those waters.

Recent national and international initiatives highlight the need to address fisheries bycatch issues, including seabird bycatch. The FAO *Code of Conduct for Responsible Fisheries* was adopted on October 31, 1995 by the FAO Conference and calls for States to "take appropriate measures to minimize waste, discards, catch by lost or abandoned gear, catch of non-target species, both fish and non-fish species ... and promote, to the extent practicable, the development and use of selective, environmentally safe and cost effective gear and techniques." (FAO *Code of Conduct for Responsible Fisheries*, Article 7.6.9).

NMFS recently published a strategic document for *Managing the Nation's Bycatch: Programs, Activities, and Recommendations for the National Marine Fisheries Service* (NMFS Bycatch Plan) (NMFS 1998c), which states the national objectives, goals, and recommendations of the Agency. The NMFS Bycatch Plan addresses current programs and future efforts to reduce bycatch and bycatch mortality of marine resources, including protected species and seabirds.

In 1997, the 22nd Session of COFI considered a proposal for an experts consultation on *Guidelines for a Plan of Action* for the reduction of incidental seabird catch in longline fisheries. These experts were to meet intersessionally and submit their work to the 23rd Session of COFI in 1999. The proposal culminated in the collaborative development of the IPOA-S. The IPOA-S called upon States to develop national plans of action to reduce the incidental catch of seabirds in longline fisheries which they regulate.

The IPOA-S calls on States to assess the degree of seabird bycatch in their longline fisheries and voluntarily develop a course of future research and action. The NPOA-S is to be implemented consistent

² This definition includes demersal, or bottom, longlining for groundfish and some sharks, as well as pelagic, or surface, longlining for other shark species, tunas, and other highly migratory species.

³ This gear type was formerly referred to as "trawls." The current use of the term describes a series of lobster traps attached to one main line as "lobster trawls."

with the FAO *Code of Conduct for Responsible Fisheries* and any applicable rules of international law, and in conjunction with relevant international organizations.

NMFS believes that implementation by the United States of the *Code of Conduct for Responsible Fisheries*, the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), the NMFS Bycatch Plan, and the IPOA-S will result in a significant reduction in seabird bycatch in the fisheries of the United States. Reducing seabird bycatch will require the joint and cooperative efforts of NMFS, the regional fishery management councils, the FWS, the commercial longline fishing industry, environmental non-governmental organizations, and other interested groups.

Purpose

The purpose of the U.S. NPOA-S is to reduce seabird bycatch in those U.S. longline fisheries where bycatch is determined by a regional fishery management council to be a problem. Although the NPOA-S does not include quantitative criteria for determining what constitutes a problem, each regional fishery management council must make a determination and must make it consistent with applicable federal law, the FAO *Code of Conduct for Responsible Fisheries*, and the NMFS Bycatch Plan (NMFS 1998c).

Statutory Authority and Agency Responsibility

The Magnuson-Stevens Act mandates conservation and management of fishery resources, and compliance with other applicable laws such as the ESA and MBTA that mandate or prohibit actions regarding seabirds. The NMFS Bycatch Plan guides NMFS and its cooperating parties – the regional fishery management councils, states, interstate fishery commissions, fishing industry, conservation community, and other special interest groups – in current and future efforts to reduce bycatch and bycatch mortality of marine resources. Implementation of the NOPA-S will also assist NMFS in meeting its goals under the Magnuson-Stevens Act, other federal law, and international agreements, including the FAO *Code of Conduct for Responsible Fisheries*.

Although NMFS is responsible for taking action when endangered seabird species interact with fisheries, the FWS has expertise on and legal responsibility for seabird management. In recognition of this expertise and responsibility, the Assistant Administrator, National Marine Fisheries Service, and the Director, U.S. Fish and Wildlife Service established a seabird inter-agency working group (SIAWG) to develop the NPOA-S. The resulting NPOA-S is a collaborative effort that has increased communication between seabird specialists within both FWS and NMFS. Maintaining this level of cooperation is a high priority for both agencies.

Regional Fishery Management Organizations

Several regional fishery management organizations (RFMOs) have addressed seabird bycatch by adopting conservation and management measures regulating regional longline fishing fleets. For example:

- The Commission for the Conservation of Antarctic Living Marine Resources adopted measures in 1992 to minimize interactions with seabirds by longline fleets in the convention area. These regulations include a bird-scaring device, avoidance of the dumping of offal, weighted groundlines when possible with the "Spanish method" of longline fishing, and the use of thawed bait.
- The Commission for the Conservation of Southern Bluefin Tuna (CCSBT) adopted a recommendation regarding the collection of fishery data, mitigation measures, and education for ecologically-related species, including seabirds. All member nations of CCSBT currently are required to use bird-scaring lines, also known as "tori poles," in their longline operations.
- The International Pacific Halibut Commission requests voluntary information on seabird bycatch from participants in their fishery and operators of vessels fishing for Pacific halibut off Alaska are required by NMFS to comply with the same seabird avoidance regulations that are in place for the groundfish longline fisheries off Alaska.

Development of the National Plan of Action for Seabirds

The decline of foreign fishing operations after 1976 within the U.S. EEZ, combined with government support programs for domestic fishermen, led to the development of the U.S. offshore fleet. With the development of these offshore fisheries, the United States also began to encounter large-scale interactions with seabirds and other protected species. Regulations designed to reduce seabird bycatch in the Bering Sea/Aleutian Islands (BSAI) and Gulf of Alaska (GOA) groundfish fisheries were instituted in 1997, and in the Pacific halibut longline fisheries in 1998. Research is being conducted in both the Alaska and Hawaii regions to minimize seabird-fishery interactions and examine the effectiveness of various seabird bycatch reduction devices (BRDs).

While seabird bycatch information is collected in most NMFS observer programs, the focus of U.S. fisheries bycatch research has been on marine mammals and turtles, not birds. Collection of seabird data through logbooks and scientific observations has not been given the same priority as for other species, especially in those regions that do not have bird species protected by ESA provisions. Additionally, many of the statistical designs for bycatch research have been for these other non-bird species, which may be sufficiently different from seabirds in terms of migrations and range to prevent simple extrapolation of the limited seabird data to larger geographic areas. These deficiencies should be corrected as soon as possible and practicable at the regional level to include the collection of data that would allow for seabird assessments.

The FWS has authority for seabird species and the regulation of those activities that affect them, except for fishing activities in the EEZ that are the direct responsibility of NMFS. The broader biological perspective of FWS toward seabirds has resulted in the infrequent participation by NMFS in basic research on seabird biology. While cooperation between these two agencies on seabird-fisheries interactions has been improving over the past few years, the two agencies often continue to address the issues from different perspectives.

Technical expertise, and review and comment of initial drafts of the NPOA-S were provided by the SIAWG (Appendix 5, List of SIAWG Members). Constituent input was solicited during public briefings and through <u>Federal Register</u> notice and comment at two stages in the development of the NPOA-S.

The U.S. National Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries

International: Role of COFI

The IPOA-S urges States to assess the incidental seabird catch in their longline fisheries, and voluntarily develop a NPOA-S if they determine that a problem exists. Participating States understood at the February 1999 COFI meeting that individual countries would undertake these assessments, and develop seabird mitigation measures and regulations, as necessary. COFI acknowledged that there are limited financial and technical resources within the FAO to assist in these tasks.

The United States will raise the issue of seabird mitigation through the development and implementation of NPOA-S at meetings of RFMOs and other regional and international fora.

National: Implementation of the U.S. NPOA-S

Longline fisheries exhibit numerous regional differences such as: target species, geographic location, gear used, depth fished, season, weather, vessel characteristics, and seabird species present. Correspondingly, each longline fishery poses different levels of risk to incidental seabird capture. The biological and life history characteristics of different bird species will also affect the levels of risk both to incidental capture and to the overall impact to the species population. These numerous differences may require that each fishery develop its own unique solution to reducing seabird bycatch.

Implementation of the NPOA-S may vary among regions and fisheries. This perspective notes the need of some regions to start or complete additional research on seabird bycatch in their longline fisheries as well as the recognition that each fishery is unique and may therefore require unique seabird management measures. By not proscribing any particular measures to each fishery within the national plan, the regional fishery management councils will have the additional flexibility to incorporate measures they consider appropriate.

The NPOA-S discusses the issues of seabird interactions and bycatch, describes current seabird research and management actions, and provides specific recommendations to the NMFS regional offices and regional fishery management councils to facilitate a coordinated national approach.

For those areas where longline fisheries occur, this NPOA calls for the following actions to be taken:

I. <u>Assessment:</u> Regional assessments of seabird interactions with longline fishing gear should be conducted by NMFS, with support from FWS, the regional fishery management councils, and the regional science centers within two years of the adoption of the NPOA-S. Regions that have conducted preliminary assessments should continue and expand these programs as possible.

The purpose of the assessment is to determine the extent and nature of seabird interactions within a fishery. The assessment may include, but is not limited to, the collection and analysis of the:

- \$ Criteria used to evaluate the need for seabird bycatch mitigation and management measures
- \$ Fishing fleet data (numbers and characteristics of vessels by size)
- \$ Fishing techniques data (demersal, pelagic, and other methods)
- \$ Fishing areas (by time and geographic location)
- \$ Fishing effort by longline fishery (seasons, species, catch, and number of hooks/year/fishery)
- \$ Status of seabird populations in the fishing areas, if known
- \$ Total annual catch and catch-per-unit-of-effort of seabirds
- \$ Existing mitigation measures in use and their effectiveness in reducing incidental catch of seabirds
- \$ Monitoring of the incidental catch of seabirds (e.g., observer program)
- \$ Statement of conclusions and decision to develop and implement management measures as needed

If, based on an assessment of the seabird bycatch in a longline fishery, a NMFS Region and/or regional fishery management council determines that a seabird bycatch problem does exist, then the following action items should be implemented within two years. Regions/regional fishery management councils should review such a determination on a regular basis, particularly taking into account changes in its fisheries, such as the expansion of existing fisheries and/or the development of new longline fisheries. If, based on an initial or a subsequent assessment, it is determined that a seabird bycatch problem does not exist, then no additional action is necessary.

- II. <u>Data Collection:</u> Data collection programs should collect reliable data to determine the incidental catch of seabirds in longline fisheries and the effectiveness of management measures. Such programs may make use of onboard observers. Ongoing data collection efforts, including the NMFS Observer Program, should be expanded as possible to include detailed data on seabird interactions, in addition to any other catch information. Some efforts towards this goal have been made regionally, but this measure should be expanded across all U.S. fisheries.
- III. <u>Prescription of Mitigation Measures:</u> Fishery-specific and appropriate mitigation methods should be prescribed. These should have documented efficiency, and be cost-effective for the fishing industry. If the effectiveness of mitigation measures can be improved by combining different mitigation measures or devices, each fishery region should implement a number of different measures that reflect the need and particular circumstances of their specific longline fishery. See the technical note attached to the IPOA-S (Appendix 1) for suggested measures.

The NMFS Regions and the regional fishery management councils should examine each regional longline fishery, even prior to the completion of the formal assessments, to determine whether the precautionary imposition of seabird bycatch mitigation is appropriate and practicable. These management measures should be incorporated within the individual FMPs as part of a new FMP or as a regulatory amendment, and subsequently incorporated as regulations.

IV. <u>Research and Development of Mitigation Measures and Methods:</u> The NMFS Regions and the regional fishery management councils should consider plans for research and development, including those aiming: (i) to develop the most practical and effective seabird deterrent devices; (ii) to improve other technologies and practices that reduce the incidental capture of seabirds; and (iii) undertake specific research to evaluate the effectiveness of mitigation measures used in the longline fisheries.

Reductions in incidental catch should be supported through continuing research into new gear designs and fishing techniques. The IPOA-S includes descriptions of incidental catch reduction gears and techniques now being used and tested in the various longline fisheries around the world.

- V. <u>Outreach, Education, and Training About Seabird Bycatch:</u> The NMFS Regions and the regional fishery management councils should:
- Prescribe means to raise awareness among fishers, fishing associations, and other groups about the need to reduce the incidental catch of seabirds in longline fisheries; make available the National and International Plans of Action and other information on the incidental catch of seabirds in longline fisheries; and promote the implementation of the NPOA-S within the fisheries.
- \$ Provide information about technical or financial assistance for reducing the incidental catch of seabirds.
- Design and implement outreach programs for fishers, fisheries managers, gear technologists, maritime architects, shipbuilders, conservationists, and other interested members of the public. These programs should aim at improving the understanding of the problem resulting from incidental catch of seabirds and the use of mitigation measures. The outreach program may include educational curricula, and guidelines disseminated through videos, handbooks, brochures and posters. The program should focus on both the conservation aspects of this issue and the economic benefits of expected increased fishing efficiency *inter alia* by eliminating bait loss to seabirds.

NMFS and FWS should also continue to promote the national development and implementation of the IPOA-S in all relevant international and regional fisheries organizations.

VI. <u>Reporting:</u> The NMFS Regions and the regional fishery management councils will each prepare an annual report on the status of seabird mortality for each longline fishery, including mitigation and research efforts and assessment information as available. Reports will be submitted to headquarters offices of NMFS and FWS and made available to the public. Such regional annual reports may be compiled and incorporated into NMFS' biennial status report to FAO on its implementation of the *Code of Conduct for Responsible Fisheries*. If appropriate, and as requested, a SIAWG may participate in the compilation, drafting, and review of the NPOA-S section of the biennial report.

VII. <u>Collaboration between NMFS and the FWS on Seabird Issues:</u> NMFS and the FWS will continue to collaborate on seabird bycatch issues at both a regional and national level. Collaborative efforts could include, but are not limited to:

- \$ Participation in the existing infrastructure of the regional fishery management councils as a means to review and/or recommend changes to regional seabird bycatch programs;
- \$ Research to determine the effectiveness of mitigation measures or the development of improved measures;
- \$ Development and/or review of seabird bycatch data collection in onboard observer programs;
- \$ Outreach, education, and public awareness programs on the seabird bycatch issue;
- \$ Recognition of fishers and organizations that significantly promote the reduction of seabird bycatch;
- \$ Sponsorship and/or participation in national and international meetings relating to the seabird bycatch issue;
- \$ Assessing, at least every four years, the implementation of the NPOA-S for the purpose of identifying cost-effective strategies for increasing the effectiveness of the NPOA-S;
- \$ Continuing participation in ESA Section 7 Consultations as needed.